

Amendments to the Claims:

This listing of the claims replaces the listings of the claims in the present patent application:

Listing of Claims:

1. **(Currently Amended)** In an electrical device having an audio interface port, a method for identifying a headset plugged into the device audio interface port, the method comprising:

supplying a test voltage to ~~[[a]]~~ the device audio interface port;

measuring a voltage level at the device audio interface port that includes comparing the measured voltage level to a threshold value;

identifying a headset type plugged into the device audio interface port in response to measuring the voltage level and comparing the measured voltage level to the threshold value;

identifying a stereo headset with a measured voltage level that exceeds the threshold value; and

identifying a mono headset with the measured voltage level indicating that the mono headset is configured to be grounded.

~~removing the test voltage to the device audio interface port; and,~~

~~supplying an audio signal to the device audio interface port after removing the test voltage.~~

2. **(Cancelled)**

3. **(Currently Amended)** The method of claim 1 ~~[[2]]~~ wherein identifying a headset type in response to comparing the measured voltage level to a threshold value further comprising: includes:

identifying the ~~[[a]]~~ stereo headset for a measured voltage level greater than the threshold value; and~~[[,]]~~

identifying the [[a]] mono headset for a measured voltage level less than the threshold value.

4. **(Currently Amended)** The method of claim 1 [[2]] wherein identifying a headset type in response to comparing the measured voltage level to a threshold value further comprising: includes:

Identifying the [[a]] stereo headset for a measured voltage level less than the threshold value; and[[,]]

Identifying the [[a]] mono headset for a measured voltage level greater than the threshold value.

5. **(Currently Amended)** The method of claim 1 [[2]] wherein measuring a voltage level at the device audio interface port further comprising: includes:

driving a network with the test voltage and dividing the test voltage between a resistance for the network and a resistance for the headset; and[[,]]

measuring a divided test voltage at the audio interface port.

6. **(Currently Amended)** The method of claim 5 wherein measuring the divided test voltage at the audio interface port further comprising: includes:

accepting an analog voltage;

converting the analog voltage to a digital signal; and[[,]]

interpreting the digital signal.

7. **(Previously Presented)** The method of claim 5 wherein the supplying the audio signal to the device audio interface port comprises supplying a stereo audio signal in response to identifying a stereo headset.

8. **(Currently Amended)** The method of claim 5 wherein driving a network with the test voltage and dividing the test voltage between a resistance for the network and a resistance for the headset further comprises includes using the network to reduce a rate of change for the voltage at the device audio interface port.

9. **(Original)** The method of claim 1 further comprising:

plugging the headset into the device audio interface port; and,
detecting, in the device, the presence of the headset.

10. **(Currently Amended)** In an electrical device having an audio interface port, a system for identifying a headset plugged into the device audio interface port, the system comprising:

an audio interface port to accept variable impedance headphone jacks;

a first switch with an input connected to receive a test voltage, a control input to accept a switch control signal, and an output to supply the test voltage in response to the switch control signal, ~~the test voltage being removed when audio signals are supplied to the audio interface;~~

a test network with a first port connected to the first switch output and a second port connected to the audio interface port, the test network to condition current to the audio interface port; and,

an identification sub-system with an input connected to the audio interface port and an output to supply the switch control signal, the identification sub-system determining voltage levels at the audio interface port and comparing voltage levels with a first predetermined threshold value to identify a headset type connected to the audio interface port, in which a stereo headset is identified with a measured voltage level that exceeds the threshold level and a mono headset identified by the measured voltage level indicating the mono headset is configured to be grounded.

11. **(Currently Amended)** The system of claim 10 wherein the identification sub-system identifies the ~~the~~ [[a]] stereo headset in response to determining a voltage level above the first threshold value and the ~~the~~ [[a]] mono headset in response to determining a voltage level below the first threshold value.

12. **(Currently Amended)** The system of claim 10 wherein the identification sub-system identifies the ~~the~~ [[a]] stereo headset in response to determining a voltage level below the first threshold value and the ~~the~~ [[a]] mono headset in response to determining a voltage level above the first threshold value.

13. **(Original)** The system of claim 10 further comprising: a test voltage source with an output connected to the first switch input; and, wherein the identification sub-system includes: a voltage determination sub-system with an input connected to the audio interface port and an output to supply a determination signal responsive to the voltage at the audio interface port; and, a controller having an input connected to the voltage determination sub-system output and an output to supply the switch control signal, the controller comparing determination signals with a second predetermined threshold value to identify a headset type connected to the audio interface port.

14. **(Original)** The system of claim 13 wherein the controller identifies a stereo headset connected to the audio interface port in response to accepting a determination signal with a value above the second predetermined threshold value and a mono headset in response to accepting a determination signal with a value below the second threshold value.

15. **(Original)** The system of claim 13 wherein the controller identifies a stereo headset connected to the audio interface port in response to accepting a determination signal with a value below the second predetermined threshold value and a mono headset in response to accepting a determination signal with a value above the second threshold value.

16. **(Original)** The system of claim 13 further comprising a microcontroller logic unit with an input and a first output connected to the test network first port; and, wherein the controller, the test voltage source, and the first switch are included in the microcontroller logic unit, the controller input and the voltage determination sub-system output are connected to the logic unit input, and the first switch output is connected to the logic unit first output.

17. **(Original)** The system of claim 16 wherein the voltage determination sub-system is an analog-to-digital converter (ADC) with an input connected to the audio interface port and an output connected to the logic unit input.

18. **(Original)** The system of claim 16 wherein the test network includes a first resistor with a first end connected to the logic unit first output and a second end connected to the audio interface port.

19. **(Original)** The system of claim 18 wherein the test network further includes a first capacitor with a first end connected to the first resistor second end and a second end connected to ground.

20. **(Original)** The system of claim 19 wherein the test network further includes a second switch with a first port connected to the first capacitor second end, a second port connected to ground, and a control input to accept first control signals, the second switch to close in response to accepting a first test control signal; and,
wherein the logic unit includes a second output to supply first control signals, the output to supply the first test control signal in response to the logic unit supplying a test voltage at the first output.

21. **(Original)** The system of claim 20 wherein the second switch is a transistor with a first terminal connected to the first capacitor second end, a second terminal connected to ground, and a control terminal connected to the logic unit second output, the transistor being enabled in response to accepting the first test control signal.

22. **(Original)** The system of claim 21 wherein the transistor is selected from the group including field effect transistors (FETs) and bi-polar junction transistors (BJTs).

23. **(Original)** The system of claim 19 wherein the test network further includes a second resistor with a first end connected to the first resistor second end and a second end connected to the audio interface port.

24. **(Original)** The system of claim 18 further comprising:

a digital-to-analog converter (DAC) with an input to accept a stereo control signal and an output connected to the audio interface port, the output to supply stereo signals in response to accepting the stereo control signal; and,

wherein the logic unit includes a third output connected to the DAC input, the third output to supply the stereo control signal in response to the logic unit identifying a stereo headset on the audio interface port.

25. **(Original)** The system of claim 24 wherein the test network further includes:

a second capacitor with a first end connected to the first resistor second end and a second end; and,

a third switch with a first port connected to the second capacitor second end, a second port connected to ground, and a control input to accept second control signals, the third switch closing in response to accepting a second test control signal and opening in response to accepting a termination second control signal; and,

wherein the logic unit includes a fourth output connected to the third switch control input, the fourth output to supply a second test control signal in response to the logic unit supplying a test voltage at the first output and the termination second control signal in response to the logic unit supplying the stereo control signal.

26. **(Original)** The system of claim 24 further comprising:

a blocking network with a first port connected to the DAC output and a second port connected to the audio interface port.

27. **(Original)** The system of claim 18 further comprising:

the audio interface port with at least four lines; and,

the headset plugged into the audio interface port.

28. **(Currently Amended)** In an electrical device having an audio interface port, a system for identifying a headset plugged into the device audio interface port, the system comprising:

the audio interface port;

a headset plugged into the audio interface port;

an analog-to-digital converter (ADC) with an input connected to the audio interface port and an output to supply a determination signal responsive to a voltage level on the audio interface port;

a microcontroller logic unit with: a first output to supply a test voltage signal, ~~the test voltage being removed when audio signals are supplied to the audio interface port~~; an input to accept the determination signal, the logic unit to compare determination signal values with a predetermined threshold value to identify a headset type connected to the audio interface port, wherein a stereo headset is identified with a measured voltage level that exceeds the threshold level and a mono headset identified by the measured voltage level indicating the mono headset is configured to be grounded; and a second output to supply a stereo control signal in response to identifying a stereo headset;

a test network including: a first resistor with a first end connected to the logic unit first output and a second end; a capacitor with a first end connected to the first resistor second end and a second end connected to ground; and, a second resistor with a first end connected to the first resistor second end and a second end connected to the audio interface port;

a digital-to-analog converter (DAC) with an input connected to the logic unit second output and an output to supply stereo audio signals in response to the DAC accepting a stereo control signal; and,

a blocking network including: a capacitor with a first end connected to the DAC output and a second end; and, a resistor with a first end connected to the capacitor second end and a second end connected to the audio interface port.